Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte EDWARD A. FOX

Appeal No. 2003-1491
Application No. 09/473,834

ON BRIEF

Before COHEN, McQUADE, and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 5 to 8, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to a method of dispensing viscous liquid contents from a flexible tube. A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

Claims 5 to 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,361,939[1] to Robertson, Jr. (Robertson).

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the final rejection (Paper No. 11, mailed March 18, 2002) and the answer (Paper No. 16, mailed November 6, 2002) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 15, filed July 2, 2002) and reply brief (Paper No. 17, filed December 23, 2002) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the

[1] Issued November 8, 1994.

respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The claimed subject matter

Claim 5, the only independent claim on appeal, reads as follows:

> A method of dispensing viscous liquid contents from a flexible tube having an open end and a crimped end, said method comprising:
> dispensing a small amount of the contents of said tube to create a depleted portion of said tube;
> applying finger pressure to the crimped end of said tube to urge contents from said crimped end to the depleted portion of said tube causing said crimped end to become the depleted portion of said tube;
> folding the depleted crimped end of said tube upon itself[2] to create a folded portion of said tube and
> securing said folded portion with an elastic band, separate and distinct from said tube, stretched to encompass said folded portion; and
> continuing to dispense the contents of said tube by applying finger pressure on said folded portion,
> removing the elastic band from the folded portion,
> folding the folded portion upon the newly depleted portion and
> securing the newly folded portion by re-encircling with said elastic band and
> repeating this sequence until the contents of said tube have been dispensed.

[2] In our view the phrase "upon itself" as used in the clause "folding the depleted crimped end of said tube upon itself to create a folded portion of said tube" is inaccurate since the depleted crimped end of the tube is not folded upon itself (i.e., the depleted crimped end) but is folded upon an undepleted portion of the tube to create a folded portion of the tube as shown in Figures 2 and 3. The appellant should consider an appropriate amendment to claim 5 to remove this inaccuracy.

The teachings of Robertson

Robertson's invention relates to a retainer for a collapsible dispensing tube. More particularly, his invention discloses a retainer of flexible and expandable material for attachment to the rolled portion of a collapsible dispensing tube to maintain the tube in a rolled configuration. In the "DESCRIPTION OF THE PRIOR ART" section of the patent, Robertson states that:

> Collapsible dispensing tubes for semi-liquid and gel-like substances are well known in the prior art and are used for dispensing substances ranging from toothpaste to adhesives. The walls of these tubes are of sufficient strength to avoid rupture and are of sufficient flexibility to be collapsible and deformable. Pressing the walls of these tubes together forces substance from the open end of the tube. As the substance inside a portion of the tube becomes exhausted, the end portion of the walls of the tube may be rolled upon itself to assure maximum dispensing. As increased dispensing is desired, the amount of the tube that is rolled may be increased.
>
> The strong but flexible material of these tubes does not independently maintain its rolled or wound configuration. Therefore, before using a tube which has previously been rolled, the end portion of the tube must be re-rolled to its previous configuration. To avoid this burdensome and time consuming rerolling, many inventions have disclosed devices to prevent the unrolling of the end portion of a tube.

Figure 1 shows three varying sizes, 20, 40, and 60 of the re-usable retaining device for maintaining a collapsible tube in a rolled condition. Figure 2 shows three varying sizes 120, 140, and 160 of an alternate configuration of the retaining device. For illustration purposes, device 40 will be used throughout this discussion to represent all configurations of the device.

Retaining device 40 is a single elongated body having two circular apertures 22, 24 spaced apart to define a bridge portion 26. The perimeter of the retaining device 40 includes two straight sides 28 and 30 and two arcuate ends 32 and 34. Positioned at the junction of one of the straight sides, 28 or 30, and one of the arcuate ends, 32 or 34, is a gripping tab 36 defining a corner element of an angle A of approximately 90 degrees. The alternative configuration shown in Figure 2 does not have the gripping tab 36.

As shown in Figures 3A and 4, the retaining device 40 is attachable to the rolled portion 38 of a collapsible tube 42 to block it from unraveling. One of the circular apertures 22 or 24 is positioned around one of the corners 44 or 46 of the rolled portion 38. Retaining device 40 is then stretched or expanded to place the other circular aperture 22 or 24 around the uncovered corner 44 or 46 of the rolled portion 38. Rebound forces from the expanded retaining device 40 are exerted upon the corners 44 and 46 of the rolled portion 38 to secure the retaining device 40 on the rolled portion 38. The dotted lines in Figure 3A represent the tube 42 in its unrolled condition.

In addition to being expandable, the material of the retaining device 40 is sufficiently flexible to mold to the shape of the rolled portion 38. This guarantees that the retaining device 40 does not interfere with the storage or use of the dispensing tube

42. The material of the retaining device 40 forming the circular apertures 22 and 24 contacts the entire perimeter of the rolled portion 38 to maintain the rolled portion 38 in a round configuration.

The removal of the device 40 from the collapsible tube 42 is quick and easy. The gripping tab 36 extends from the elongated body and therefore does not mold to the shape of the collapsible tube 42 as firmly as the rest of the retaining device 40. Thus, the gripping tab 36 may be easily separated from the tube 42 and pulled to remove the retaining device 40. The gripping tab 36 is formed at one location on the retaining device 40 to prevent unnecessary waste of material. Additionally, having only one gripping tab 36 limits the locations where the retaining device 40 is not firmly molded to the rolled portion 38 to minimize potential interfere with the storage or use of the collapsible tube 42.

The retaining device 40 works most effectively when its overall length, L, is approximately equal to the width, W, of the bottom of the tube 42 to be retained. This size relationship of the retaining device 40 to the tube 42 assures that when the retaining device 40 is stretched for affixing on the tube 42, there are sufficient rebound forces to hold the device 40 on the tube 42 without creating forces of such strength to tear the retaining device 40.

Our determination

In our view, the subject matter of claim 5 is not anticipated by Robertson for the reasons set forth by the appellant in the briefs before us in this appeal. To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). In this case, the claimed step of "continuing to dispense the contents of said tube by applying finger pressure on said folded portion" as set forth in claim 5 is not disclosed in Robertson. In Robertson, the contents of the tube are continued to be dispensed by applying finger pressure on the tube above the folded portion and the retaining device, not to the folded portion as claimed.

Since all the limitations of independent claim 5 are not disclosed in Robertson for the reasons set forth above, the decision of the examiner to reject claim 5, and claims 6 to 8 dependent thereon, under 35 U.S.C. § 102(b) is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 5 to 8 under 35 U.S.C. § 102(b) is reversed.

REVERSED

IRWIN CHARLES COHEN Administrative Patent Judge	)
JOHN P. McQUADE Administrative Patent Judge	) BOARD OF PATENT) APPEALS) AND) INTERFERENCES
JEFFREY V. NASE Administrative Patent Judge	)

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